FOURTEEN CASES

OF

OVARIOTOMY.

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FOURTEEN CASES OF OVARIOTOMY.

In July 1863, I read before the Edinburgh Medico-Chirurgical Society an account of the first successful cases of ovariotomy performed in Scotland since Mr Lizars' single and partial success in 1825. The subjects of these operations have remained in perfect health. One married eight months after the operation, and the others have since performed the usual duties of home life; while one, twenty-seven years of age, in whom the weight of the tumour removed, now a year and a half ago, was upwards of one hundred and twenty pounds—the largest tumour, by far, ever removed successfully from the living body—is now a strong healthy woman. It is proposed to continue an account of all the operations for ovarian disease which I have since then performed—successful as well as unsuccessful—in the order in which they occurred. I wish it to be understood that these are fair cases; I have not removed small tumours, and I have invariably declined operation when the general health was very good and the disease the cause merely of inconvenience, and not of danger to life. But I have not felt warranted in declining a single case—however large the tumour or however much reduced the strength of the patient—in which there was even a bare probability of success, although by operating on very large tumours, or in desperate cases, one, of necessity, risks both the credit of surgery and his own reputation. In one case which I saw last year, and again a few months ago, interference with the tumour was not recommended, on account of its extensive and intimate connections with the uterus, bladder, and rectum. I have lately declined other three cases in which I was asked to operate; but in all of them the disease had nearly reached its natural termination. Of these, one died within forty-eight hours, another within a week, and the third within three weeks after being first seen. It would have been simple foolhardiness to expect, that in such extreme cases nature would give one any assistance, in sustaining the shock, or repairing the injury necessarily inflicted by such a severe proceeding as ovariotomy must always be in large tumours. All of these cases, however, had been most favourable for removal only a few weeks or months before. With these exceptions, I have declined no case where the tumour was capable of being removed. It is only fair to add, that since

I commenced these operations, nearly two years ago, I have declined operating in nine cases, in which the general health was not interfered with, and life not yet threatened by the disease, on the ground that I was not justified in recommending, and the patient not warranted in undergoing, such a formidable operation. Of these, I regret to say, three at least have died. Two died in the country, after a first tapping to facilitate their journey to town. Another, who came to me first about eighteen months ago, I declined, though a most favourable case at that time for operation, on the ground that the tumour was merely an inconvenience to her. She was very anxious to have it removed, and I agreed to do so as soon as her general health became much affected. She left disappointed, went home, had the cyst injected with iodine, suffered a great deal of pain for several days after the injection; returned in a few months, larger than ever, with her general health much impaired, and asked me now to fulfil my promise, and remove the tumour. But I was obliged to decline a second time, on account of the adhesions that had formed in the pelvis after the injection of iodine into the cyst. These were of such firmness that the removal of the tumour would have been impossible.

The average weight of the tumours removed was a little over 42 lbs.; the average of the fatal cases upwards of 50 lbs., while that of the successful cases was 39 lbs., or, excluding the very large tumour, a little upwards of 31 lbs. Adhesions, generally extensive and often of great firmness, were met with in all the cases except four, and these four recovered without the slightest unfavourable symptom. And, though equally favourable recoveries occurred in some cases where adhesion was great, in not a few a successful result was got with great difficulty, and after a long and tedious convalescence, with more or less suppuration in the pelvis.

In the following case an attempt was made, towards the natural termination of the disease, to save the life of one of the most remarkable women I ever met. She had been repeatedly tapped, and I had in consequence to deal with unhealthy blood, and with a nervous system enfeebled by long and great suffering, and if the attempt was a failure, and her life was thereby shortened by a few months, the unfortunate termination seemed after all to have arisen from rupture of, and hæmorrhage from, the ovary that was left, and which at the time of the operation was apparently in a healthy state —one of those accidental and unforeseen circumstances that every now and then must arise after all capital operations.

Case I.—*Multilocular Ovarian Tumour, weighing nearly* 80 *lbs. Ovariotomy. Death on the second day.*

In the end of May last, Dr Thomson of Dalkeith asked me to see a married lady, twenty-three years of age, who had just come under his care. She had made a long railway journey the day before, and was in consequence much fatigued. She was so emaciated, and looked

so exhausted, that the idea of interfering with the tumour in any way seemed out of the question. The abdomen was occupied by an enormous multilocular tumour, and she measured upwards of fifty inches at the umbilicus.

The disease had been detected when she was seventeen years of age, a few months before her marriage. Its progress was slow, her health continued excellent, and after the first tapping no solid matter was felt, and she was soon able to be about again. The tappings went on, however, the intervals steadily shortening by one-half, and now, after each time an increasing mass of solid matter was felt, and her size diminished less and less. Till the last tapping, three months ago, her general health had remained unaffected; but since then she had not rallied as she used to do, and had been quite an invalid. She suffered greatly from neuralgic face-ache and pain in the right side over the semi-solid part of the tumour. She had lost flesh very much, took little food, and lived mostly on stimulants.

She required tapping about a week after this. Upwards of 50 lbs. of thick fluid were removed. The tumour consisted of one enormous cyst, with a large semi-solid mass occupying the right side, extending under the ribs. The tumour was unattached in the pelvis, but the large cyst did not subside much. A few days after this tapping she was seized with phlegmasia dolens of the left leg. She suffered severely, but in three weeks she was able to be up again. She was put upon full non-stimulating nourishment, her general condition improved, and she gained flesh; while the tapping, which was looked for in six weeks, was delayed for upwards of three months. It became necessary, however, by the middle of August, and upwards of 50 lbs. of fluid were again removed. I was not aware at the time of the tapping that the period had not quite passed over, and she was scarcely laid on her back when she was seized with an intense pain in the right groin. She said she was sure something had given way. The pain was most acute, and for two or three days she was very ill, with all the symptoms of peritonitis. She had great abdominal tenderness, and a rapid pulse. In a week, however, she was again up, and then, for the first time, she spoke to me of the chances for and against her after ovariotomy. She knew she could not now have an average chance, but still there seemed a reasonable prospect of success.

The tumour was accordingly removed on the 27th of August. There was slight parietal adhesion in front, and the omentum was wound around and adherent to the semi-solid portion of the tumour over a great extent, but there was no difficulty in securing the vessels, and but little injury done in its separation. The mass of semi-solid matter was, however, very large. It extended under the ribs on the right side, over the upper part of the abdomen, and across to the left side. Several large cysts were tapped, and the mass reduced so that it was easily withdrawn. The mass of secon-

dary cysts and cyst walls weighed nearly 30 lbs., and upwards of 50 lbs. of fluid had been removed from the largest cyst, about ten days before. Before closing the wound the right ovary was drawn aside, and some of my friends present remarked what a healthy ovary it looked. Satisfied with its small size and natural appearance, I did not touch it.

She was put to bed in an excellent state. The night was passed quietly, and next morning she had an excellent expression, and quiet pulse. About eleven o'clock she suddenly vomited, and complained of the same intense acute pain that she had felt after the last tapping, and said surely something had given way. Her pulse began to rise after this; and she died thirty-eight hours after the operation.

The pelvis was nearly full of sero-sanguinolent fluid. On the posterior border of the right ovary were two ruptures—one of some standing the other quite recent. In the one was adhering a decolorized clot; and this rupture had probably taken place during the menstrual period, at the time of the last tapping, ten days before. In the other the fissure was recent, and a very large coagulum was adherent in it.

Case II.—*Multilocular Ovarian Tumour weighing* 40 *lbs. Ovariotomy. Recovery.*

An unmarried lady, twenty-three years of age, who had enjoyed an average amount of health, had her attention directed by her friends, about the middle of July last, to an increase of her size. She was seen early in August by Dr Drummond of Glasgow, who found the abdomen occupied by a large ovarian tumour. The formidable nature of the affection under which she laboured, and the only remedy for it were explained by him to her friends, but as her life was not then threatened by the disease, no immediate interference was recommended. She was advised to live quietly, and go for a time to the country.

A few days after this, when on her way through Edinburgh, she was seized with severe abdominal pain, and was unable to complete her journey. Her distress was farther aggravated by the jolting in a cab on her way to a friend's house, and when seen shortly after by Dr Warburton Begbie, she was suffering from severe peritonitis. The acute symptoms soon yielded to the remedies employed, but the tumour enlarged. She suffered so severely from the distention, she had such weary sleepless nights, and began to lose flesh so rapidly, that on the 21st it became necessary to relieve her by tapping, the girth at the time being nearly 45 inches. This I did at Dr Begbie's request. Nearly four gallons (40 lbs.) of thick green fluid were removed. The cyst walls were felt to be very thick, and were extensively adherent to the parietes, while a mass of secondary cysts filled up the left iliac region.

She was much relieved, and in the course of a fortnight was able to be removed to Ayr. Though she gained strength to a certain extent she was unable to walk, but was moved about in a chair. The cyst commenced to refill, she increased at the rate of half an inch a-day, and in little more than a fortnight she was brought back to town nearly as large as before. On the 27th, tapping was again necessary; and 35 lbs. of very thick fluid were removed. She did not, however, diminish so much as after the former tapping, for the mass of secondary cysts had greatly increased.

It was now evident that the disease could no longer be safely temporized with, and that it would run its course with unusual rapidity. It became necessary for me to place before her in cold statistics, the risks and advantages of the radical cure. She had to take her choice between the certainty of a short life,—and it would have been a very short one, not free from suffering, and the chance of a long life after ovariotomy. The operation was at once decided upon, and performed on the 29th of September—two days after the second tapping. Dr Begbie, Dr Warburton Begbie, Dr Craig of Ratho, Dr Sidey, and Dr Keith, were present. There were extensive but recent parietal adhesions, which gave way readily to the hand. The pedicle was short and broad, extending about twelve or fourteen inches along the base of the tumour. The clamp was applied within an inch of the uterus, and there was consequently a good deal of strain upon the pelvic tissues; a troublesome oozing from some torn adhesions to the false ribs on the right side delayed the closing of the wound for nearly half an hour; otherwise nothing unusual occurred.

The cyst walls weighed 5 lbs. 6 oz., and 35 lbs. of fluid had been removed from the large cyst two days before.

No bad consequences followed; and since her return to Glasgow, a month after the operation, she has enjoyed excellent health.

Case III.—*Large Semi-solid Ovarian Tumour. Ovariotomy. Recovery.*

In the end of August, Dr Wm. Brown asked me to see a young lady only sixteen years of age, in whom an attack of abdominal pain had led to the detection of an ovarian tumour, about seven months before. Its increase was rapid, and in July last it was punctured below the umbilicus, and after passing a sound through the canula, and breaking into several cysts, a considerable quantity of very thick viscid fluid was obtained, without, however, much diminishing the size or determining at any one point the subsidence of the tumour. When I saw her six weeks after, she was nearly as large as before.

This young lady's case is thus described by the author of the *Excursion Chirurgicale en Angleterre*, who was present at the tapping, " Ainsi, j'ai vu une jeune fille de 15 à 16 ans, dont je vous ai déjà parlé, atteinte d'un kyste multiloculaire énorme à contenu visqueux, filant, gris verdâtre, dont la ponction, après avoir vidé

diverses poches, ne parvint à déterminer le retrait sur aucun point, de l'épigastre au pubis et d'un flanc à l'autre. Évidemment il y aurait eu imprudence à tenter l'extirpation d'une telle tumeur dont les adhérences étaient si fortes et si étendues qu'elles auraient empêché probablement le chirurgien de terminer l'opération. Il est évident que, dans ces circonstances, l'operation est contra-indiquée, et que la maladie parâit inévitablement mortelle ; mais c'est un cas à rapporter aux contre-indications naturelles de l'ovariotomie."

The abdomen was entirely occupied by a large irregular semi-solid mass. There was only one cyst of any size, which occupied the epigastric space, extending under the sternum. The ribs were already being pushed outwards, and the ensiform cartilage pointed slightly upwards. In the left hypochondrium the tumour bulged outwards, and felt very hard and near the skin. She had long suffered from severe pain in this region, and here firm adhesion was evident. In the right iliac region the tumour felt also very hard and near the surface, and here, too, pain had been from time to time complained of. The pelvis was occupied by a solid mass coming below the brim, and the uterus, though it could not be moved from off the tumour, had a sort of rotation upon it, giving the impression that the pedicle was very short, rather than that adhesion existed between the two.

She was pale and thin, with a feeble circulation, but her general health was still good. She took her food well, slept well, and was able to take carriage exercise without fatigue.

After this she went to the country, and I saw her again on her return to town in the beginning of November. Her general health continued good, but the tumour had increased in all directions,—especially above. The cyst, filling the epigastric space, was larger and more tense and prominent. The ensiform cartilage now pointed directly upwards. The ribs were more bulged outwards, especially laterally, and the measurement over the lower end of the sternum was two inches greater than at the umbilicus. My attention was now directed to the state of the spine, for the whole of the lumbar and three lower dorsal vertebræ were very prominent, rendering the curvature of the back so great, that with the bulged condition of the ribs she was quite barrel-shaped.

In hopes of getting some information as to the connexions of the upper part of the tumour, I tapped the upper cyst at its lower margin, on the 12th November, midway between the umbilicus and ensiform cartilage. A large trocar was used, but after a few ounces of very glutinous fluid escaped, the stream stopped and no more could be obtained, though on passing in a probe it was evident the cyst was of considerable size. Soon after, pain came on, and in the course of an hour I found her with a pale anxious countenance, thoracic breathing, and a very rapid pulse, suffering from intense pain and tenderness, with vomiting, all over the upper portion of the abdomen. Large opiates and fomentations relieved this, but for some days her condition gave rise to not a little anxiety. All

this time there was a constant oozing, from the puncture, of the same gelatinous sticky fluid, and it was supposed that altogether more than a gallon made its escape. For two or three days there was clear sound on percussion, as low as two inches below the ensiform cartilage, but by the end of a week this had quite disappeared, and the dulness extended as high as before. It was afterwards found that the upper cyst had not in the least refilled, but that its position had been occupied by the semi-solid portion moulding itself into its place.

After repeated examinations of the tumour, it seemed to me that there was no obstacle to its removal, as far at least as its upper portion was concerned. But the nature of its connection with the uterus could not be quite satisfactorily determined, while the now very great curvature of the spine—rendering it uncertain whether this arose from disease of the bodies of the vertebræ themselves, or whether it was simply caused by the direct weight and pressure of the now almost solid tumour—added greatly to the anxious doubts and grave responsibilities of the case. But on the other hand, the patient was but sixteen years of age, of a healthy family, with young and probably not yet unhealthy blood, and her nervous system as yet not much broken down by suffering or sleepless nights. I, accordingly, felt warranted in recommending to the patient and her friends, that an attempt should be made to remove the tumour, else there was nothing to be looked forward to but a short and miserable life. And as the recent inflammatory attack would, in all probability, lead to the formation of extensive adhesion along the upper part of the tumour, it was evident that this attempt should not be delayed very long. She had lost flesh since the tapping, and had not been out of bed. She was not in a very good state for the operation, for the tongue was big and foul, but there was very little chance of her ever again getting into a better.

The tumour was accordingly removed on the 21st of November. Dr Brown was present. Dr Keith gave chloroform, and Dr Keiller and Dr James Sidey gave me their usual invaluable assistance. The tumour was exposed over a mass of thickened and contracted cysts, the result apparently of the first tapping. The opening was enlarged sufficiently to admit the hand, which was pushed through loose adhesion downwards, and the pelvic cavity examined as far as it was possible to do so. It was apparently free of adhesion, but the uterus could not be reached. Below the umbilicus the adhesions were very loose, and gave way at once to the pressure of the hand. Above they were much as was anticipated, being nearly universal. These were all gradually separated by the hand; but, on the left side, they were of the utmost firmness, and in breaking them down the tumour fissured and gave way in all directions. I was, however, totally unprepared for the great mass of solid substance that extended under the ribs, for three-fourths of the whole tumour lay above the umbilicus, and though I had enlarged the incision up to the ensiform cartilage, I am sure I could not have removed the

tumour entire. A very large trocar was then pushed here and there into it, but only a small quantity of very viscid thick matter could be obtained. I next cut deep into the heart of the mass below the umbilicus, cut with the knife and opened cysts in all directions, and, passing in my hand, broke down the inside of the tumour. This was not easily accomplished, for the divisions between the cysts—and they were all small—were very fibrous and thick, and gave way to the fingers very unwillingly. Half a pailful of fluid and broken down cysts was thus obtained, but the vascularity of the interior was so great, that it was necessary to finish this part of the operation with the utmost rapidity and with apparent roughness. I succeeded at length in dragging through an opening, extending only an inch above the umbilicus, a mass of solid matter and cyst-walls, weighing upwards of 20 lbs. As this was withdrawn a firm and thick band of adhesion arising from the right iliac region came into view. It formed almost a second pedicle, and contained large vessels. It was transfixed and tied. The pedicle itself now came into view on the left side, but the uterus came out with it. The upper part of the pedicle which ran along the tumour up to near the false ribs was of great length, but it gradually shortened and disappeared in the corner of the uterus which was quite close to the tumour. It was tied in four or five divisions, for the clamp could not be got under the tumour and the mass cut away. The clamp was then applied round the long part of the pedicle, and an attempt made to tie the vessels singly in the portion which was connected so closely with the uterus ; but after tying two large vessels, there was so much oozing that I reluctantly embraced the whole in the clamp, bringing the uterus in consequence against the abdominal wall. When the bleeding from the torn adhesions had ceased, the clots were removed and the pelvis sponged out, and the omentum, which was of very great size, was carefully spread by the fingers over the intestines, and especially over the left side where the adhesions had been strongest, and where the tendency to ooze was greatest. The wound was then closed by thirteen deep stitches, placed closely together on account of the thinness of the abdominal wall. But the elevation of the ribs was so great that the cavity of the abdomen remained half-filled with air. The ribs were pushed downwards and the air pressed out as much as possible alongside the clamp,—a large heavy compress of wet lint being placed over the wound and a bandage over the ribs to keep them down and prevent the re-entrance of air.

She was under chloroform for an hour and a half. The whole proceeding had been one of the utmost severity ; and when the pallid, fragile, emaciated form was lifted into a warm bed, and left to nature and an intelligent nurse, it seemed to us all that nature had been asked to do too much to repair the injury that had of necessity been inflicted.

But on the sixth day after the operation she felt so well that she thought she might be allowed to do a little work. That night she had a slight chill, which, however, seemed to have passed off by

next day after free perspiration, without doing any harm. The seventh night was restless, and in the morning for the first time the pulse was rising. There was some abdominal tenderness, which was not relieved by having the bowels moved by enema. By mid-day the distention was considerable, and as there was some pull upon the clamp, it was removed. This was followed by relief of the pain, and to a considerable extent of the distention also. The pulse continued to rise, and towards afternoon vomiting came on, and though the sutures had been removed some days before, no harm was done to the freshly united wound by the first attacks of vomiting. Some strips of plaster were, however, put on, not that they were absolutely necessary, but to give confidence during the vomiting. The attacks of vomiting went on every half-hour, and were very severe, the pulse having now risen to 150, and her condition for some hours was most critical. The state of the pedicle was examined after every attack. It had considerably retracted, and there had been some oozing from it, and during every fit of retching there was a gush of yellow serum from the abdominal cavity. About midnight a large vessel was observed bleeding from the stump of the pedicle; this was at once secured, and the whole freely touched with the perchloride of iron. Towards morning copious serous discharges came from the bowels, and the vomiting then ceased. In a few days there was decided fulness of the recto-vaginal fossa, but as there was now a good deal of discharge from the lower end of the incision—at first of a serous oily nature, then dirty serous, and then purulent—it was not interfered with, but its degree of tenseness carefully watched from day to day. By the end of the third week the discharge from the wound was copious, and continued more or less for several weeks. During all this time the pulse continued high, but her recovery—thanks to the most careful and intelligent of nursing—was now uninterrupted, and six weeks after the operation she was thoroughly convalescent. She was round-shouldered for some time, and had a considerable stoop, but this soon wore off when she began to get out, and the spine quickly regained its normal curvature; and in a short time it was impossible to recognise, in the healthy-looking blooming girl, the subject of all the anxious doubts of a few months before.

Case IV.—*Multilocular Ovarian Tumour, weighing 26 pounds. Ovariotomy. Recovery.*

On the 18th of October last, Dr M'Watt of Dunse asked me to see Mrs J., aged fifty, who had sought his advice four months before on account of ovarian disease. She was then scarcely able to retain any food, and had had several attacks of vomiting of blood. Under treatment the vomiting ceased, and her general health became much improved till five weeks before I saw her, when she was obliged to take to bed on account of severe abdominal pain which had continued more or less ever since.

She was a very little woman, pale, extremely emaciated, and

very feeble. The pulse was small, and generally about 90. She had restless nights from dyspnœa, and could scarcely take any food. She measured 41½ inches at the umbilicus. The upper part of the tumour was fluid, but from the extremely œdematous condition of the abdominal wall it was impossible to make out the state of the lower portion. The uterus was central, normal, and movable, but the roof of the vagina came very low down, especially on the left side. The general condition of the patient was so unfavourable that the idea of operation could not then be entertained; but in hopes of giving her some temporary relief, about two gallons of fluid were removed from the upper cyst by puncturing it above the umbilicus. A large semi-solid mass was now felt to occupy the lower and left side of the abdomen below the umbilicus. After some days, when the œdema of the wall had somewhat subsided, Dr M'Watt was able to make a more careful examination, and was satisfied that the adhesions were both firm and extensive.

Much to our surprise she rallied, and had so far regained strength as to be removed to town in the beginning of January. The tumour had nearly regained its former dimensions, and the œdematous anterior wall hung down over the pubis, forming a tumour nearly the size of the head.

She got cold on her way into town, and had an attack of influenza, which was prevalent at the time. To relieve the bronchial irritation and dyspnœa, she was again tapped, and the œdema of the limbs and abdominal wall having somewhat subsided, the tumour was removed on the 16th of January. Dr M'Watt of Dunse, Professor Stewart of Kingston, Dr Sidey, and Dr Keith were present. The external incision was extended to two inches above the umbilicus. The omentum was lying between the tumour and wall, adherent to both. As the parietal adhesion was very firm, I cut through the omentum till the surface of the tumour was reached; and finding the adhesion of the omentum less firm to the tumour than to the wall, I separated it from the tumour to the left side till the free edge was reached. It was then freed and turned to the right side, but all its parietal attachments were not separated. Very firm parietal adhesion existed between the semi-solid part of the tumour occupying the left side and iliac region. Posteriorly the tumour was embedded in a mass of small intestine and mesentery. These adhesions were easily separable, except a piece of mesentery, about the size of the palm of the hand, which was very firmly attached, and contained large vessels. Lower down its connections were separated along the brim of the pelvis on the left side, and a semi-solid mass was adherent along the side of the rectum and hollow of the sacrum. This last adhesion was firm, and part of the serous covering of the tumour was torn off and remained. Finally, the mass was turned out after much injury had been inflicted on the peritoneum. The pedicle was short, and when the calliper clamp was secured outside, from the thickened state of the abdominal wall there was a great pull upon the uterus. Part

of the omentum, which was still adherent to the pedicle and side of the uterus, was separated, and some vessels secured; still there was a good deal of oozing coming up apparently from the torn pelvic adhesions. This was found at last to come from a fissure in the pedicle immediately below the clamp. The clamp was accordingly removed and readjusted, and the bleeding point secured. The wound was then tightly closed by a number of deep stitches in anticipation that the œdematous state of the wall would subside in a few hours.

There was a good deal of shock. She passed a restless night, and next morning there was so much distention from flatulence that the head of the clamp was buried in the wound, and the handles standing up at nearly a right angle. These unpleasant symptoms disappeared shortly after giving her some simple food. By the end of the third day the stitches were lying loose and were removed, as was also the clamp, the wound being quite united throughout. On the ninth day she was removed during the day to the nurse's bed, and was walking through the room by the end of the second week. She returned to Dunse, a distance of fifty miles, in the midst of a snow-storm on the twenty-fifth day after the operation. Since then she has enjoyed the best of health.

Case V.—*Multilocular Ovarian Tumour, weighing* 37 *lbs. Ovariotomy. Death, on the sixth day, from Peritonitis.*

M. B., aged forty, a tall, thin, sallow-looking woman, unmarried, was sent to me last autumn by Dr Wilson. She had an ovarian tumour of five months' growth, which already nearly reached the ensiform cartilage, but as it had not yet given her much inconvenience beyond what arose from its bulk, I recommended her to let it alone. Her girth then was 37 inches.

She returned in four months. She was now 42 inches at the umbilicus; the tumour had nearly doubled in size, and she had lost much flesh. She was now unable to do anything for herself, was beginning to have restless nights, and suffered from pain in the epigastrium, while the lower extremities were distended almost to bursting. There was also great œdema of the loins and abdominal wall, as high as the umbilicus; there was no albuminuria.

She had lived a very sedentary life, and some years before had been confined to bed for nearly twelve months with subacute rheumatism, which had left her hands slightly deformed. She was, moreover, the only surviving member of her family, all of whom had died early, mostly of phthisis. Her general condition was thus not a very favourable one for ovariotomy; still the case seemed a fair average one.

She was tapped in the end of January. Twenty-three lbs. of thick fluid were removed from a large cyst which composed the lower half of the tumour. The upper portion of the tumour did not in the least subside, and a large semi-solid part continued to

occupy the upper half of the abdomen. The œdema of the limbs soon subsided, but the cyst began at once to refill.

The tumour was removed on the 7th of February through an opening just sufficient to admit the hand. The lower cyst was first tapped, and the upper cysts were emptied through the larger one. There was parietal adhesion, easily separated by the hand, from a little above the umbilicus upwards over the epigastrium. As the mass of cyst-walls, weighing upwards of 6 lbs., was being withdrawn through rather a small opening, one of the cysts gave way, but none of the contents seemed to get into the abdominal cavity. There was no bleeding, no exposure of the intestines, and the operation was completed in a few minutes. There was a slight pull upon the uterus when the clamp was secured outside, but not nearly so much as I had often met with before. The wound was closed by deep and superficial silk sutures as usual.

She vomited very severely as she came out of the chloroform, and complained all afternoon of intense sickness, with burning at the epigastrium. By evening she was suffering severely from flatulence, which continued all night, preventing sleep. This continued to a most distressing degree, with a constant overpowering feeling of sickness. By the end of the second day, there was some distention of the upper part of the bowel, which went on increasing. The pulse also began to rise. The clamp was removed on the third day, and a good deal of yellow serum followed its removal, without, however, affording relief. I could not satisfy myself that there was any accumulation in the pelvis from the examination of the recto-vaginal fossa. She died on the morning of the sixth day.

The small intestines were found all glued together by recent lymph, pretty well organized; and in the pelvis, which was completely shut off from the rest of the abdominal cavity, there was about half a pint of dirty thin peasoup-looking fluid, with flakes of lymph, showing the low form of abdominal inflammation. The wound was quite healed, and the peritoneal line of incision could scarcely be distinguished. I had allowed the silk sutures to remain in all the time the patient lived. She died on the morning of the sixth day, and there was no matter lying along their tracks. It would appear, therefore, that in this case at least, the silk suture answered all the purposes that the admirers of the wire suture claim for it.

CASE VI.—*Unilocular Ovarian Tumour. Ovariotomy. Recovery.*

In April last, Professor Christison asked me to see a married lady about fifty years of age, who had laboured under ovarian disease for upwards of twenty years. The tumour had been of very slow growth, and had scarcely affected her general health till about the time I saw her. The abdomen was occupied by a large single cyst, and the contained fluid felt so thin and so near the surface that but for the history, it would have been impossible to tell

whether it was ascitic or ovarian. There was slight œdema of the limbs, and she was thin; otherwise her health was good.

Three months afterwards the tumour had considerably increased, there was also greater œdema of the extremities, she was unable to lie down at night, and the heart was beginning to beat above its normal level. It was accordingly agreed to remove the cyst; but, before doing so, I emptied it, and as the fluid was clear, of low specific gravity, and as there was no solid mass whatever to be felt, —only a thin-walled cyst,—it seemed more prudent to delay for a time any farther interference.

She suffered severely for several days after the tapping from abdominal pain, vomiting, and vesical irritation. She was, however, able to be about again in ten days, and for nearly eight months she enjoyed excellent health, and no trace of the cyst could be detected. About the end of February, however, it suddenly began to fill with great rapidity, she quickly lost flesh, and it was agreed to remove the tumour as soon as the œdema of the lower extremities should commence.

This was accordingly done on the 25th of March. Professor Syme, Dr Dewar of Kirkcaldy, Dr Sidey, and Dr Keith were present. An incision about three inches in length was made, commencing midway between the umbilicus and pubis; the peritoneum opened to half this extent, and a large non-adherent cyst tapped and drawn out. The cyst arose close from the uterus, the clamp was placed round its lower portion, and from the absence of pedicle and great depth of the pelvis, there was a considerable drag upon the uterus, which was brought up close to the wound. In consequence of this there was a good deal of dragging pain in the back complained of for the first forty-eight hours, to relieve which small opiate enemas were given by the nurse when the pain got troublesome; otherwise no unpleasant symptom appeared, and she did not suffer nearly as much as she had done after the tapping. She was in the dining-room to breakfast by the end of the third week, and returned to the country twenty-five days after the operation.

This lady is the wife of one of the best known and most successful Scotch provincial surgeons,—a man of unusual sagacity, but unfortunately long laid aside from active life by great suffering; and his experience of ovarian tumours during a long and active practice of nearly forty years did not encourage him to recommend any other mode of treatment than the radical cure. And while he observed the slow but steady progress of the disease, and looked forward to the time when it would necessarily interfere with the life of his wife, he keenly watched the history and progress of ovariotomy in Great Britain, and so far back as ten years ago, having thought the matter out for himself, he ventured to assure her, that by the time her tumour should require interference, the operation of ovariotomy would be as common as and more successful in its results than, amputation of the leg. Till 1858, however, the success of the operation in England had not been very encouraging, and in Scotland and Ireland the results had

been invariably unsuccessful. Its progress at that time seemed stationary, or rather it seemed to retrograde; for the surgical heads of the profession would not give it a fair trial, while the majority denied it a place in legitimate surgery. But, in 1858, the operation was taken up in earnest by Mr Wells. In his hands it was much simplified, and he introduced common sense into its after-treatment. It became at once evident that a period of progress had begun, and it may be imagined how eagerly were watched the brilliant results that year after year have followed the operation in Mr Wells' hands; for there can, it seems to me, be no doubt that to Mr Wells belongs the credit of reviving this operation in England, and of establishing it as one of the most justifiable and often most welcomed operations in surgery.

The above case, though the simplest I had yet operated on, and the only one in which I had not met with extensive adhesion, is, however, a very important one, as showing the confidence with which the operation of ovariotomy is being received by the profession. In this family there were no fewer than four intelligent medical practitioners, who, when the question of ovariotomy was brought near them in the person of a near relative, thought the whole matter out for themselves, and recommended the operation; and they were too good surgeons not to recognise the good surgical principle, that the less broken-down the general health of the patient the greater would be the probability of success.

CASE VII.—*Cystic and Adenoid Ovarian Tumour. Ovariotomy. Recovery.*

In March last, Dr Drummond of Glasgow asked me to see a lady who had come under his care two months before, on account of ovarian disease. She had enjoyed good health till the autumn of 1861, when she suffered from attacks of diarrhœa. During 1862, she had violent and repeated attacks, and was then put upon a diet consisting chiefly of beef juice, and upon this she has since continued principally to live. In January 1863, the lower extremities began to swell, and for the first time she felt her dresses tight upon her. She again had diarrhœa in the autumn of that year, and in September had an attack of menorrhagia, which continued ten days, with some violence, but which did not recur. In November she was seized with sudden acute pain in the left iliac region, recurring from time to time, and of great severity. When Dr Drummond saw her, two months ago, he found a tumour in the left and lower part of the abdomen, pushing down into the pelvis, and there was distinct ascitic effusion. She was very much emaciated and feeble, with œdema of the lower limbs, and altogether she looked very ill. The question at that time with Dr Drummond was, whether it was a case of malignant disease or of multilocular ovarian tumour complicated with ascites.

She was placed on a full diet, with a liberal allowance of wine, and sent for change of air to the country. She returned to Dr

Drummond in six weeks, with her general health greatly improved, but with the abdominal swelling immensely increased, and its ovarian nature now undoubted.

I found a vigorous old lady, just entering on her sixty-eighth year, nearly blind, moreover, from double cataract. She was very sallow, and extremely thin, with a dry, red, irritable tongue, but with a heart beating so quietly and firmly, that one's first impression was, that with fair play such a constitution was good for many years to come. She complained mostly of flatulence, from which she had suffered all her life, and attributed to it attacks of dyspnœa, which came on generally towards morning, and which were sometimes prolonged and severe. She still had diarrhœa from time to time.

There was œdema of the lower extremities, and to a slight extent also of the abdominal wall. The tumour was very prominent, and extended up to the ribs on either side, the upper part of the abdomen being very much distended from flatulence. Immediately above the pubis was a projecting solid elastic mass, about the size of a child's head—the rest of the tumour was cystic, but its upper margin was very ill defined, and it had a peculiar boggy feeling—leaving upon me the impression that some soft substance, such as the omentum or a mass of intestine, lay between the tumour and abdominal wall. In the pelvis it was entirely solid, an elastic piece of it, coming very low down, filled up the recto-vaginal fossa. In front of the uterus, which was barely movable, it felt very hard and solid, and was continuous with the mass above the pubis. At first view this state of matters looked suspicious either of malignant disease or of great pelvic adhesion. But after repeated examination I was satisfied that the base of the tumour was free from attachment either to the rectum, uterus, or bladder. The tumour certainly had a peculiarly elastic feeling which I had not met with before, but it was just as likely to be adenoid as malignant, and this it turned out to be.

About a week after I first saw her, she had a severe peritonitic attack, occasioned by being jolted in a cab. This was followed by a large accumulation of ascitic fluid, which disappeared in a few days, almost as suddenly as it came, after some diarrhœa. Its presence, however, completely cleared up the diagnosis of the pelvic portion of the tumour, but the upper part still retained the same ill-defined character that it had always presented; and at the umbilicus there was generally a small extent of clear sound over the tumour, as if at that point there was adhesion of the intestine. She remained under observation for a month, the tumour steadily increasing in all directions. She had occasional feverish attacks, with abdominal tenderness, followed by ascitic accumulation, which came and went very rapidly. She was fast losing flesh and strength; the dry red tongue still continued; the disturbance from flatulence became more distressing, and the attacks of dyspnœa more frequent and severe. It was after seeing her in one of these attacks, which

more resembled a paroxysm of angina, that I resolved to remove the tumour, for it was evident that her life was not now safe from one day to another. Considering the great age of the patient, her great feebleness, her blindness, and the doubt as to the relations of the upper part of the tumour, this determination was arrived at with not a little difficulty.

On the 21st April, I opened the abdomen very carefully, immediately below the umbilicus. The wall was very thin, and a few touches of the knife exposed the surface of an ovarian cyst. This was emptied through a small canula, and another upper cyst then came into view. This was quite flaccid and half-empty, with part of the small intestine and mesentery adhering to it, and fully explained the feeling communicated to the hand by external examination. The omentum was very large, but was nowhere adherent. The intestine was then carefully separated, but its muscular coat was slightly exposed. Several small vessels in it and its mesentery were tied with silk—the ends cut short and left behind. The solid mass was then turned out of the pelvis without difficulty. The uterus came out with it, but there was plenty of room to secure the pedicle outside in the usual way. The whole weighed about fourteen pounds.

For several days after the operation there was very great distention of the abdomen, and there was a fear for a time that some low abdominal inflammation was going on, there being for some days considerable fulness of the recto-vaginal fossa. On the fifth day there was some swelling of the parotid, which gave rise to great pain and constitutional disturbance, and went on to suppuration. After this, her recovery was unimpeded, and she returned to Ayrshire six weeks after the removal of the tumour. The tongue by that time had become pale and moist. She had no more attacks of diarrhœa, and felt better than she had done for years. The last time I heard of her, she said she was "as good as new."

Case VIII.—*Semi-solid Ovarian Tumour, weighing 24 lbs. Ovariotomy. Death on the ninth day.*

J. M., aged 21, a domestic servant, called on me in March last, on account of a semi-solid ovarian tumour, extending nearly to the ensiform cartilage—her girth at the umbilicus being forty inches. She stated that nine months ago she came up from Golspie, a strong healthy woman; that for the last six months, since she became aware of the presence of the tumour, she had felt feeble, and unable to do almost any work; that she rarely passed a day without sickness and pain; that her nights were restless and wearisome; and that for the last week she had been mostly in bed. She was much depressed in spirits, and very anxious to have the tumour removed.

A few days after this visit, she was obliged to take to bed, with severe abdominal pain, and almost incessant vomiting. This state of irritation continued, with short intervals of relief, for the next

month. She was never able to be out of bed, and when she sat up she had a peculiar tendency to faintness, which was remarkable and unusual. In the middle of April she was removed to a suitable lodging, where for a short time her general health improved. The vomiting ceased, she enjoyed her food, and slept well. She was then in a fair state for operation, and it would have been performed on the 21st had not the monthly period come on with great violence, accompanied by such severe gastric irritation, vomiting, and pain, and such prostration of strength, that for some days she was in a most critical state, and it seemed as if she would never again get into a condition for operation. She rallied, however, and the tumour was removed on the 29th of April. Dr Benjamin Bell, Dr Traill of Dunfermline, Dr Carruthers of Cramond, and other friends were present. There was no parietal adhesion, but part of the omentum was firmly attached to the upper portion of the tumour,—several vessels were tied with silk, and the ends of the ligatures cut off short and left. A piece of omentum, from which there was a good deal of oozing, was transfixed and tied, the threads being likewise cut short and returned. The pedicle was of good length, and was secured by the clamp without any strain upon the uterus. Some ascitic fluid in the pelvis was then sponged out, and she was put to bed in a very good state.

For the two days following the operation she remained in a very feeble and depressed condition, the pulse ranging from 120 to 150. There was, however, no pain, no vomiting, and no distention. On the third day the pulse had fallen to 100; and by the end of the first week her recovery was looked upon as undoubted. The abdomen had remained quite flat; the wound was perfectly united; the stitches were all removed; the bowels had acted after the fourth day of themselves; she had fair nights; and took her food remarkably well, and was cheerful at the prospect of her early return to health and independence. But on seeing her on the morning of the ninth day, I was startled by her appearance, which reminded me of a case of typhus. She had had a restless night; the pulse was up to 115; there was slight subsultus, and she was covered with a bright papular eruption. On calling in the evening, I found she had died rather suddenly about half an hour before. There was no post-mortem examination, but that blood-poisoning was the cause of death I have no doubt.

CASE IX.—*Unilocular Ovarian Tumour. Ovariotomy. Recovery.*

M. C., 35 years of age, had been under the observation of Professor Buchanan of Glasgow since the tumour was first detected about three years ago. Latterly its growth has been very rapid; and as soon as she began to lose flesh, and her general health to be threatened by the disease, he recommended the removal of the tumour.

This I did at Glasgow, on the 6th of May, at Professor Buchanan's request. Dr Drummond of Glasgow, Dr George

Buchanan, and other friends were present. The cyst was easily removed through an incision three inches in length, and a long slender pedicle secured by the clamp; the whole proceeding being of the simplest kind possible.

I saw her a week afterwards, and removed the clamp, and she made an excellent recovery.

Case X.—*Semi-solid Ovarian Tumour, weighing 35 lbs. Ovariotomy. Recovery.*

In April last an unmarried lady, forty-seven years of age, the daughter of a medical man, was recommended to me by Dr Cumming, and Dr Grigor of Nairn, as a fit subject for ovariotomy. The tumour had been detected about six months before, and had been of very rapid growth. All along there had been a great deal of pain; while for the last three months the general uneasiness had been so extreme, that she had been unable to sit or lie in any position, by day or by night, for any length of time. Before the commencement of her illness she had been very plethoric, but she was now losing flesh very rapidly.

Three weeks before I saw her, she had been tapped by Dr Grigor below the umbilicus, and about fourteen pints of fluid removed. She had little relief, however, from this, for the upper part of the tumour did not subside, and it had again nearly regained its former dimensions. The largest cyst that could now be detected was above the umbilicus, and the cyst formerly emptied did not appear to have refilled. The greatest girth was forty-three inches.

On meeting, on the 10th of May, with Dr Arthur Mitchell and Dr Cumming, for the purpose of removing the tumour, her general condition was so unfavourable, that it was agreed to postpone the operation, and simply to tap the upper cyst, in hopes of giving some relief. This cyst was found to contain about fourteen pounds of fluid, and she felt so much more comfortable after the tapping, and had such good nights, that we felt warranted in going on with the operation, on the 20th of May, ten days after the tapping. The tumour was semi-solid, and there were extensive but easily broken down adhesions in all directions. These were separated, as far as the hand could reach. The tumour was then cut into and broken up. When its size was much reduced, the hand was again passed in, and some adhesion to the small intestine and extensive adhesion to the stomach separated; and I was then able to withdraw the whole without extending the incision above the umbilicus. The pedicle was of fair length, and was secured as usual by the clamp, and the wound closed by silver sutures.

It would occupy too much space to go into the details of the tedious convalescence which followed,—the longest by far I have yet met with after ovariotomy. Violent peritonitis, nearly proving fatal, set in on the third day. This was followed towards the end of the first week, by effusion into the left pleura; and to this again succeeded a second attack of general peritonitis of great severity.

The wound, which seemed at first to have united, towards the end of the second week, took on unhealthy action, and opened up through its whole extent. Great sloughing of the cellular tissue of the abdominal wall followed, and the tracks of the wire sutures became converted into so many different sinuses, which went on discharging for weeks, the wound itself slowly healing by granulation. She had also bed sores, and lay for many weeks in a state of great feebleness on a water bed; and it was not till two months after the operation that she was able to make the long railway journey to Nairn. She is now quite well, and becoming a strong woman again.

Case XI.—*Multilocular Ovarian Tumour weighing upwards of 65 lbs. Ovariotomy. Death from Exhaustion.*

Mrs W., æt. 29, but looking twenty years older, came to me with a very large ovarian tumour. She had been seen, for the first time, the day before, by Dr Lumgair of Largo, who, though recognising the advanced stage at which the disease had arrived, still thought the case might be one for ovariotomy, as the patient had, till the detection of the disease eighteen months before, been remarkably healthy, and she was of a vigorous and healthy family.

She had already been tapped three times, and had taken a great deal of medicine of various kinds. Till two months before I saw her she had not suffered much from her complaint, and had not lost much flesh, and was generally able to look after her household affairs. She then underwent a prolonged mercurial course, which she said completely took the flesh off her bones. Since then she has been very feeble.

She was exceedingly emaciated, and presented in a well-marked degree the weary, miserable, haggard appearance of advanced ovarian disease. The tumour was very large, measuring upwards of forty-nine inches a little above the umbilicus. Between the anterior spine of the right ilium and the umbilicus the measurement was seventeen inches; between the spine of the left ilium and the umbilicus she measured twenty-one inches; and the space between the ensiform cartilage and pubis was thirty inches. The abdominal wall was, over a large extent, thickened, brawny, and œdematous. The tumour was mostly composed of one very large cyst, but there was a considerable amount of solid matter on the left side low down. The uterus was central, normal, and very movable.

She was a woman of great resolution, and though she was well aware that her case was an unfavourable one, she wished to take her chance of the operation, in the hopes of being restored to her husband and children.

She was tapped the day after I saw her, and upwards of sixty pints of very thick ovarian fluid were removed. She was much relieved. She was put upon a full diet, and slept better than she had done for months. The usual monthly period, after being

delayed for a week, continued for ten days. Nearly three precious weeks were thus lost, the cyst was filling with great rapidity, and her strength had greatly diminished.

The tumour was removed on the 23d of May. Professor Syme, Professor Lister, Dr Lumgair of Largo, and other friends were present. The girth had already increased to forty-three inches. The cyst was wounded in opening the peritoneum, and the contents were allowed to escape. There were extensive parietal and omental adhesions, and more bleeding than usual from the torn vessels, as I have always observed is the case when the abdominal wall is much thickened. Several vessels in the omentum and wall were tied with fine silk, the ends cut off and returned. A long thin pedicle was secured by the clamp as usual. Owing to a free oozing from the torn adhesions, the operation was prolonged, and there was much more sponging and handling of the parts than usual.

She had a quiet night, and required but one small opiate enema. The urine was copious, and perspiration moderate; and she took from time to time some beef-tea and other simple nourishment, with an occasional small quantity of stimulant. She complained all along of feeling very tired, and though she promised well next forenoon, her pulse, though not frequent, was very feeble; and she died in forty-six hours, as one dies from the shock of a great injury.

CASE XII.—*Ovarian Tumour nearly Unilocular. Ovariotomy. Recovery.*

An unmarried lady, now twenty-seven years of age, was seen in November 1861, by Mr Wells, who diagnosed an ovarian cyst, unattached anteriorly, with a secondary cyst or cysts in the wall a little below the umbilicus. Her health was then good, and he recommended her to wait. Some time after this, on her return home, she was for many weeks confined to bed from supposed cyst inflammation, and her general health was for long very indifferent. I first saw her towards the end of last year. She was then in good health, but thin, and measured forty-one inches at the umbilicus. The cyst was still apparently unattached, and the secondary cyst felt by Mr Wells three years before had not increased, though its position was now more upwards—sometimes to the left of the umbilicus, and sometimes near the edges of the false ribs. Delay was still recommended.

I saw her again with Dr Dunsmure in May last. The tumour was steadily increasing. She was losing flesh and was getting anxious to be relieved of her burden, and we agreed to remove it, believing that it was safer to do so than to tap so large a cyst.

This was done on the 30th of May. Dr Dunsmure and Dr Gordon of Old Aberdeen were present. The large cyst, containing forty pints of fluid, was emptied, and together with a single secondary cyst, was easily withdrawn through an opening in the peritoneum about two inches in length. As I was about to apply the clamp, a small cyst in the broad ligament was observed. This

led to a more careful examination of the attachment of the cyst, and no fewer than seven small cysts, about the size of beans, were discovered, some of them near the uterus. The ovary itself, diseased and slightly enlarged, was close to the uterus, and quite sessile. A double ligature was placed under it, but it could not be got into the clamp, which was applied almost close to the uterus. From the thickness of parts embraced in the clamp, a single stitch sufficed to close the wound. Before tightening the stitch, the strangulated ovary was brought out alongside the clamp and secured to it. Owing to the great laxity of the abdominal wall, there was not much strain upon the pelvic tissues, though the uterus was brought up close to the wound.

On the second day the monthly period came on with great violence, and there was for two days a copious discharge of menstrual-like fluid from the incision. The clamp was removed at the end of a week, but the ligatures round the strangulated ovary did not separate for five weeks after the operation. Her recovery was uninterrupted.

Case XIII.—*Semi-solid Ovarian Tumour weighing Thirty-six Pounds. Ovariotomy. Recovery.*

Miss W., aged thirty, recommended to me by Dr Haldane of Ayr, on account of a large semi-solid ovarian tumour of about six months' growth. When I saw her in the beginning of June, her greatest girth was thirty-eight inches; there was one cyst of considerable size above the umbilicus, the rest of the tumour was semi-solid. She was in pretty good health, but was getting very thin about the arms and shoulders. She could walk but a very short distance, and her nights were bad.

By the 1st of July her girth had increased to forty-two inches and a half, and there was some œdema of the limbs. To relieve this and to give her some good nights before the operation, I emptied the upper cyst, which contained about eight pounds of fluid. I removed the tumour on the 8th of July. Dr M'Lannaghan of Dalrymple was present. Some ovarian fluid, mixed with large flakes of lymph, escaped on opening the peritoneum. I then cut into the tumour, passed in my hand and broke it up, and with some difficulty was able to withdraw the whole through an incision not extending above the umbilicus. There was a great deal of sponging necessary. The pedicle was of fair length, and was secured by a clamp, and the wound was closed by six deep and three superficial silk sutures in the usual way.

She got very sick with the chloroform, and vomited bile for the next twenty-four hours, but her pulse never rose above 70, and her recovery was unusually rapid. The sutures were removed on the fourth day, except one close to the clamp which had escaped notice, which was removed on the eighth day. There was not a single drop of matter along the track of any. By the middle of the

third week she was going about quite well, and she went to her home, near Ayr, four weeks after the operation.

CASE XIV.—*Large Cyst containing Fifty-five Pounds of Fluid. Ovariotomy. Recovery.*

Miss B., aged thirty-five, a patient of Dr Halliday Douglas, had been aware of the existence of an ovarian tumour for about twelve years. I saw her first six years ago. At that time it filled up the whole abdomen; was unilocular, and unattached. It steadily increased, and now she measures forty-four inches at the umbilicus, twenty-nine between the ensiform cartilage and pubis, and twenty-eight inches between the one anterior spine of the ilium and the other. There is great elevation of the ribs, and great displacement of the heart, for its impulse is felt below the third rib two inches from the mesial line. She has latterly become very nervous and thin, and has bad nights.

On the 25th of July, I opened the peritoneum to the extent of two inches and a half, tapped, and drew out the cyst, which contained between five and six gallons of fluid. The cyst was almost sessile, and the clamp was placed round its base, the uterus being brought up nearly to the abdominal wall. One deep silk suture was sufficient to close the wound.

For several days after the operation she suffered from severe cardiac pain, apparently of a neuralgic nature, with a frequent tendency to syncope. There were no abdominal symptoms whatever, and her recovery was rapid and uninterrupted.

The following table contains an account of all the operations for ovarian tumour, which I have up to this time performed. Of twenty cases in all, six patients died after the operation, and fourteen recovered perfectly, and are now in rude health, for the cure after ovariotomy is a perfect cure.

Table of Twenty Cases of Ovariotomy.

No.	Date.	Age.	Condition.	History, etc.	Result.
	1862.				
1	Sept.	49	Married,	Multilocular; 25 lb.; surrounded by ascitic fluid;	Remains well.
	1863.				
2	Jan.	55	Married,	Multilocular; 45 lb.;.....	Remains well.
3	Feb.	24	Married,	Multilocular; 63 lb.; tapped once;.....	Died 23 hours after.
4	March.	27	Married,	Multilocular; upw. of 120 lb.; tapped 4 times;	Remains well.
5	May.	22	Unmarried,	Multilocular; 33 lb.; since married;.....	Remains well.
6	July.	52	Married,	Fibro-sarcomatous, and cystic;.....	Died 5th day.
7	Aug.	23	Married,	Multilocular; nearly 80 lb.; tapped 7 times;	Died 38 hours after.
8	Sept.	23	Unmarried,	Multilocular; 40 lb.; tapped twice;.....	Remains well.
9	Oct.	16	Unmarried,	Semi-solid; very large; tapped once;.....	Remains well.
	1864.				
10	Jan.	55	Married,	Semi-solid; 23 lb.; tapped twice;.....	Remains well.
11	Feb.	40	Unmarried,	Multilocular; 37 lb.; tapped once;.....	Died 6th day.
12	March.	50	Married,	Large single cyst;.....	Remains well.
13	April.	68	Married,	Cystic and adenoid;.....	Remains well.
14	May.	23	Unmarried,	Semi-solid; 24 lb.;.....	Died 9th day.
15	May.	35	Unmarried,	Large single cyst;.....	Remains well.
16	May.	29	Married,	Multilocular; 65 lb.; tapped 4 times;.....	Died 46 hours after.
17	May.	47	Unmarried,	Semi-solid; 35 lb.; tapped twice;.....	Remains well.
18	May.	27	Unmarried,	Multilocular; 35 lb.;.....	Remains well.
19	July.	30	Unmarried,	Semi-solid; 36 lb.;.....	Remains well.
20	July.	33	Unmarried,	Very large single cyst, containing 55 lb. of fluid;	Remains well.

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